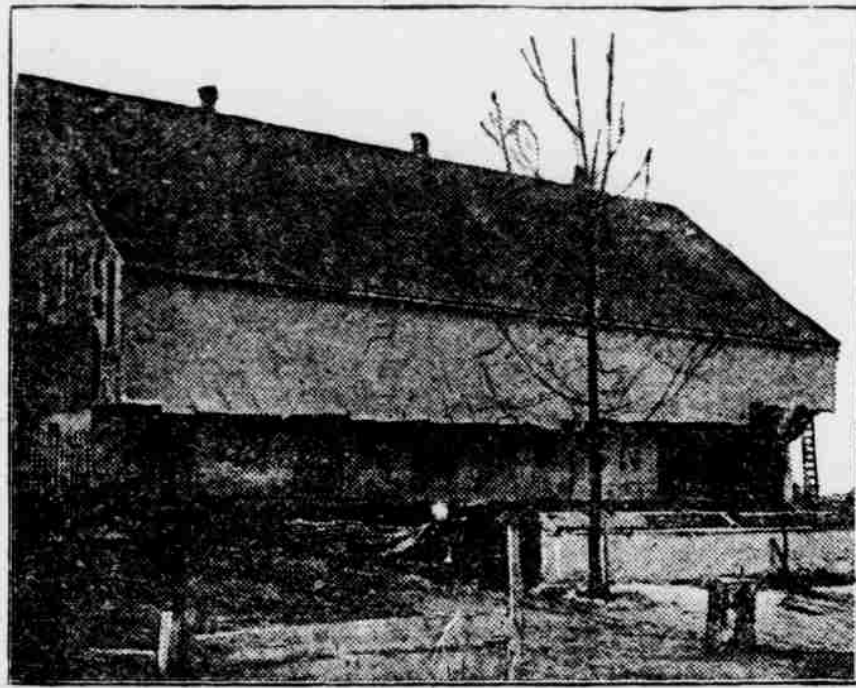


PURIFYING INFECTED STABLES AND BARN



Building Prepared for Disinfection—In This Case the Disinfecting Was Done by Fumigation—Openings in the Barn Were Closed by Paper to Prevent the Escape of the Gas.

(Prepared by the United States Department of Agriculture.)

Inspectors in the United States department of agriculture have found in the course of their work that ignorance or carelessness on the part of stock owners has frequently led to fresh outbreaks of infectious disease after it had been supposed that the previous ones had been completely stamped out. Comparatively few farmers, it is said, realize the importance of the scientific disinfection of premises which have once harbored infected stock.

When it is remembered that the germ which causes tuberculosis in cattle measures about one-thousandth of an inch in length, it is obvious that the "lick-and-promise" method of cleaning is no obstacle at all to the existence of the disease. The germ of glanders is little larger. These two germs are thrown off by diseased animals in large quantities. In the average stable they have no difficulty in finding many lodging places whence any one of a hundred different things may cause them to emerge and start a fresh outbreak upon the farm. When a stable has once harbored diseased animals, therefore, absolute disinfection with sufficiently powerful disinfectants is the only way to insure the stock from another visitation.

In Farmers' Bulletin 480, "Practical Methods of Disinfecting Stables," some of the most easily obtainable disinfectants are named, and the best methods of applying them discussed. In the first place it is imperative that the stable be thoroughly cleaned before any disinfectant at all is applied. The various surfaces such as ceilings, walls, partitions, floors, etc., should be swept free from cobwebs and dust. Where the filth has been allowed to accumulate, this should be removed by thorough scrubbing. If the wood-work has become soft and porous so that it affords a good refuge for the disease germ, it should be torn down and burned and new wood substituted. All refuse of every description should be removed to a place inaccessible to live stock and there either burned or treated with a solution of chloride of lime in the proportion of six ounces to one gallon of water. If the floor of the stable is of earth, the surface soil should be removed to a depth of four inches or more and new earth substituted. It is better, however, to take advantage of this opportunity to lay down a concrete floor, which in the end will be found more satisfactory as well as more sanitary.

The stable thus thoroughly cleansed and stripped of all its odds and ends and refuse is now ready for the application of the disinfectant. A disinfectant is a drug which has the power of destroying germs merely by com-

ing in contact with them. There are a number of these drugs, varying considerably in efficacy, and some of them dangerous to animal as well as germ life. Bichloride of mercury is one of the most powerful, but it has the great disadvantage of being a violent poison and in consequence great care must be used when handling it to keep it away from all live stock. For ordinary purposes it is probable that cresol or the compound solution of cresol, known as liquor cresolis composuit, is best adapted to general use. When the latter is used, it should be mixed with water in the proportion of four or five ounces to a gallon. Cresol is not as soluble as the compound solution and should, therefore, be thoroughly stirred while mixing. If a grade of the drug guaranteed to be 95 per cent pure is secured, two or three ounces to a gallon of water will be sufficient.

To apply the disinfectant on anything but a very limited surface, a strong spray pump is essential. The pump should be equipped with 15 feet of hose with a five-foot section of iron pipe, with a spraying nozzle at one end, attached to it. The entire interior of the stable should be saturated with the solution forced through this apparatus. Special attention should be given to feeding troughs and drains, as it is in these that the disease germs are most likely to find their first resting places. After a thorough spraying with the disinfectant, it is well to apply a lime wash containing four or five ounces of chloride of lime to each gallon. In many cases, however, it will save trouble if this wash is combined with the disinfectant. This can be done in the following manner: for five gallons of disinfecting fluid, slake 7½ pounds of lime, using hot water if necessary to start action. Mix to a creamy consistency with water. Stir in 15 fluid ounces of cresol, at least 95 per cent pure, and make up to five gallons by adding water. In case compound solution of cresol is used, add 30 fluid ounces instead of 15. Stir the whole mixture thoroughly and, if it is to be applied through a spray nozzle, strain through a wire sieve. Stir frequently when applying and keep covered when not in use.

Enforce the Bird Law.

That enemies of migratory birds in certain sections of the United States are openly violating the provisions of the federal migratory bird law is the assertion of William T. Hornaday, the eminent ornithologist. "The main body of these enemies," says Mr. Hornaday, "consists of spring shooters, who are determined to shoot and slaughter game birds in spring to the uttermost limit."

TEACHING EWE TO OWN LAMB

Among Other Plans Advocated is That of Taking Skin From Dead Animal and Placing on Another.

(By E. M. NELSON, Oregon Experiment Station.)

Nearly every year one lamb or more dies, even out of the small flocks that run on the general farm. In such cases the ewes may be made stepmothers. But, of course, it will be necessary to get the ewe to own the strange lamb. This may be accomplished in either of the following ways:

The skin may be taken from the dead lamb and placed over the lamb to be adopted. Ewes recognize their lambs by the scent, and the odor of the lambskin will make the ewe believe that the lamb is her own. The skin should be removed in about forty-eight hours, or sooner if necessary.

The ewe may be caught and held every two or three hours for the new lamb to suck. In a few days, generally five or six, the ewe will own the lamb. Sprinkling a little of the ewe's milk

over the lamb will be a great help in this method.

Weeding Gardens.

The plots where early peas, radishes, etc., were raised, if they have not been planted to late crops (the good gardener will always do this, however), should be cleared of weeds and old vines. These places may serve as weed-breeding grounds to cover the whole garden next year. Finally weed patches serve as hiding places for innumerable insects. Eggs are deposited there and the hibernating insects find such places a refuge from their bird enemies.

Success With Poultry.

Care is that part of the routine of poultry culture which bestows a kind hand on the tender younglings, to supply their little wants with a view of promoting thrift and good health.

Sift Cracked Corn.

Cracked corn should be sifted before being fed to the poultry, the amount of meal saved will more than offset the labor.

MANITOBA'S AGRICULTURAL INDUSTRY

REMARKABLE DEVELOPMENT IN THAT PROVINCE DURING THE PAST FEW YEARS.

The past year has shown that the Province of Manitoba, the Premier Province of Western Canada, stands out prominently in point of wealth in her agricultural productions. Manitoba had an excellent yield of wheat in 1914, the oat crop was not so good, and with the high price received, every farmer was placed in a good financial position.

For some years, as is probably the case in all new countries, Manitoba went largely into the growing of grain, and while this paid well for a time, it was found that having to purchase his meat, his milk and a number of other daily requisites, the farm did not pay as it should. Now, there is another side to it. Fodder crops are grown, cattle are being raised, cheese factories and creameries are established, and the result is that the financial position of the farmers of Manitoba is as strong as that of those in any other portion of the continent. Scarcely a farmer today but has realized that the growing of grains alone has a precarious side, and that positive security can only be assured by diversified farming, and securing the latest modern and most economic methods. Therefore timothy, clover, alfalfa, rye grass and fodder corn are universally grown. Most wonderful success meets the efforts of the farmers in the cultivation of these grasses, and the yields compare favorably with those of many older countries, while in many cases they exceed them.

It is worth while recording the acreage of these crops this season as compared with last, because the figures reflect the remarkable progress that is being made in dairying and in the beef and pork industry. In 1913 brome grass was sown on 24,912 acres, rye grass on 21,917 acres, timothy on 118,712 acres, clover on 5,328 acres, alfalfa on 4,709 acres and fodder corn on 20,223 acres. In 1914 the respective acreage under those crops were 25,444 acres, 27,100 acres, 165,990 acres, 7,212 acres, and 10,250 acres and 30,430 acres. Alfalfa particularly is coming into its own, the acreage having been more than doubled last year.

It is simply the natural process of evolution from the purely grain farming which Manitoba began by the method twenty years ago to the more diversified forms of agriculture that is responsible for the development along these other lines in this Province. Alberta is coming to it at an earlier stage than did Manitoba. Saskatchewan, too, is following rapidly in the same direction.

Then, as her fodder crop and root crop acreage indicate, there have been increases in the holdings of all kinds of live stock during the past twelve months, according to the correspondent for the Toronto Globe. Beef cattle number 42,000 head this year, as against 37,000 last year; milch cows are 160,474 head, as against 157,963 head; pigs number 325,000 as against 248,000; sheep number 75,000, as against 52,000; and there are 325,000 horses, as compared with 300,000 at this time last year. These are the latest Provincial figures, and they show that despite the great efflux of live stock to the United States since the opening of that market to Canada, the capital amount of live animals has increased instead of having decreased through the extra demand.

Dairying the Principal Industry.

Dairying is the industry, however, which is making dollars for the Manitoba farmer. It is developing at a rapid rate in this Province for that particular reason. The output of creamery butter last year was 4,000,000 pounds, at an average price of 27.5 cents per pound, which was an increase over the previous year of a million pounds. The output of dairy butter was recorded last year at 4,288,276 pounds. The Government department says that again this year a substantial increase in the dairy output will be shown from this Province. From this same source of information one finds that through the splendid growth in winter dairying, Winnipeg now, for the first time in years, is able to obtain a sufficient supply of milk and sweet cream from its city

dairies to satisfy its demand throughout the year without having to import large quantities of these products from the United States as was done not longer than two years ago.—Advertisement.

Scarcity of Canary Birds.

Canary birds will soon be worth their weight in gold, according to dealers, who declare that the war has cut off the usual source of supply—the Hartz mountain in Germany—and that not one of the little feathered songsters had been received in this country, except a few from Japan, since the beginning of hostilities. Formerly as many as 10,000 canary birds were received in New York from Germany in a week, and the best of them could be bought for 75 cents to \$1. Now, however, the stock of many of the principal bird stores in New York has been exhausted and the few birds on hand are bringing from \$8 to \$15 each, with the price going up as the supply lessens.

Dying Buck Pins Hunter.

Attacked by a 200-pound buck he had wounded, Elmer Middleton of this place, narrowly escaped death while hunting with George Turner in the Fairview Springs district. After sending a high caliber bullet through the shoulders of the buck, Middleton stood his rifle against a tree and started for the animals, armed only with a small ax. As he advanced to end its misery the buck brought both forefeet down upon his chest and then, falling dead from its wound, pinned him to the ground.—Ploche (Nev.) Dispatch to the Denver Post.

Literal.

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A Kentucky Case

"Every Farmer Tells a Story" Andrew Tutt, shoemaker, Morgantown, Ky., says: "I could hardly endure the pains in my back and after working, it was hours before I could straighten up. My head pained me constantly and I had awful dizzy spells. The kidney secretions were irregular and painful in passage. After I had doctored without relief, two boxes of Doan's Kidney Pills fixed me up in good shape."

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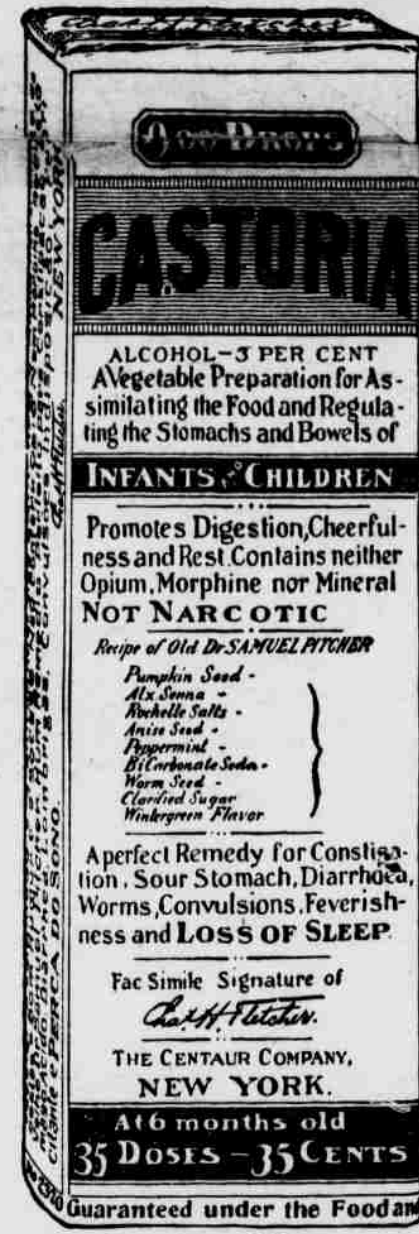
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